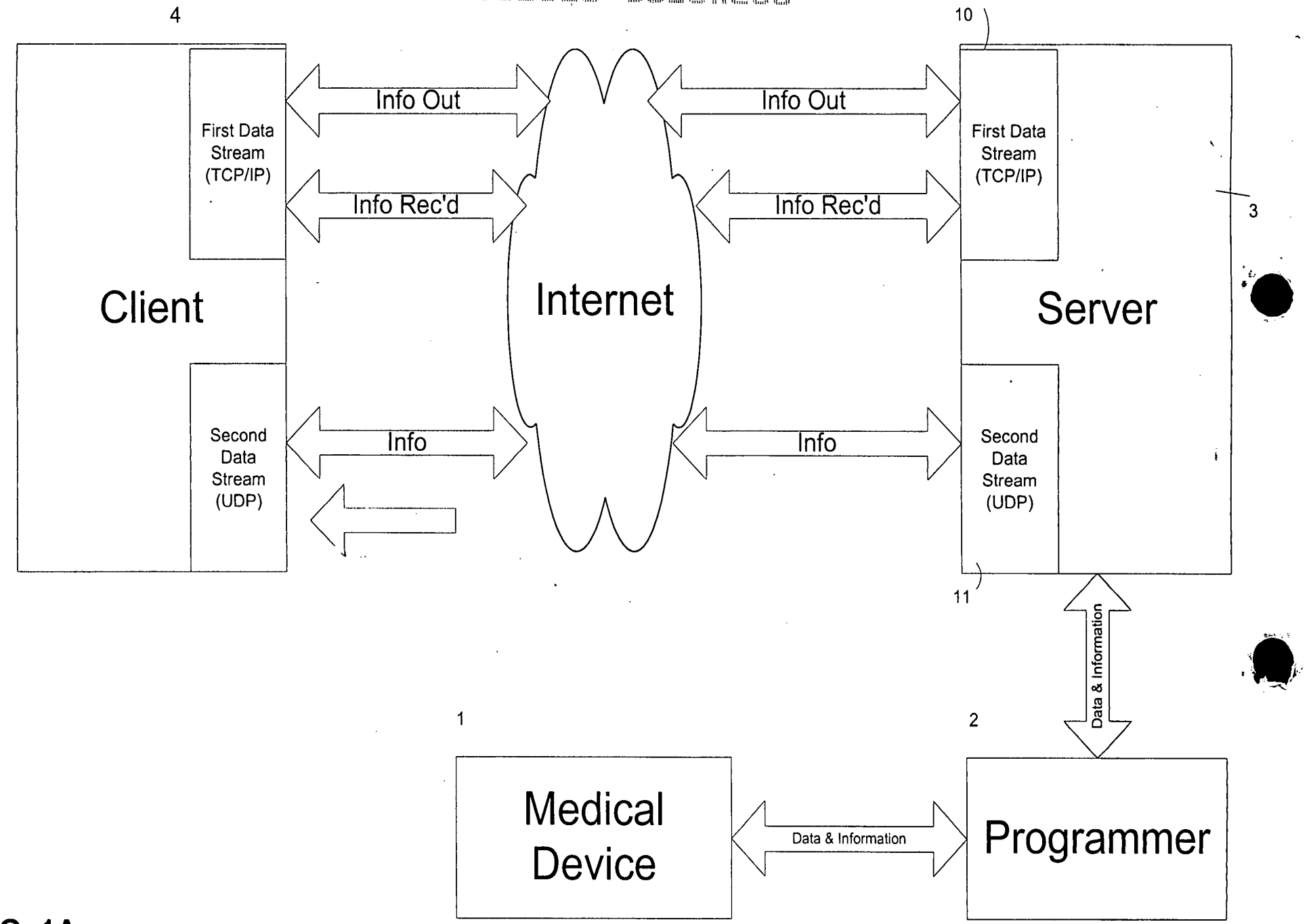

4
10
Info Out
Info Out
First Data Stream (TCP/IP)
First Data Stream (TCP/IP)
Info Rec'd
Info Rec'd
3
Client
Internet
Server
Second Data Stream (UDP)
Info
Info
Second Data Stream (UDP)
11
Data & Information
1
2
Medical Device
Data & Information
Programmer

FIG. 1A

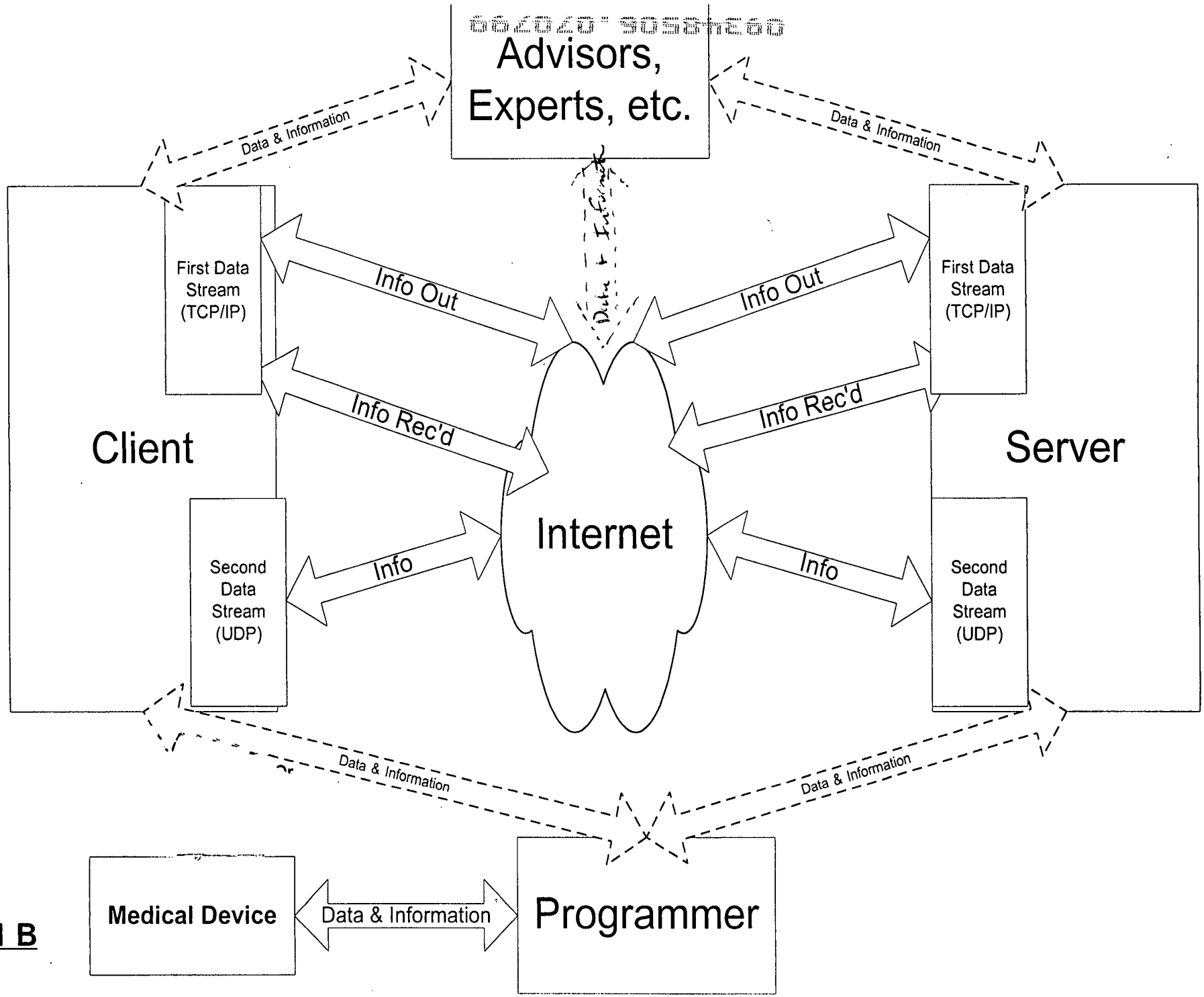

Advisors, Experts, etc.
Data & Information
Data & Information
First Data Stream (TCP/IP)
Info Out
Info Rec'd
Client
Second Data Stream (UDP)
Info
Internet
Info
Info Out
Info Rec'd
First Data Stream (TCP/IP)
Server
Second Data Stream (UDP)
Data & Information
Data & Information
Medical Device
Data & Information
Programmer

FIG1 B

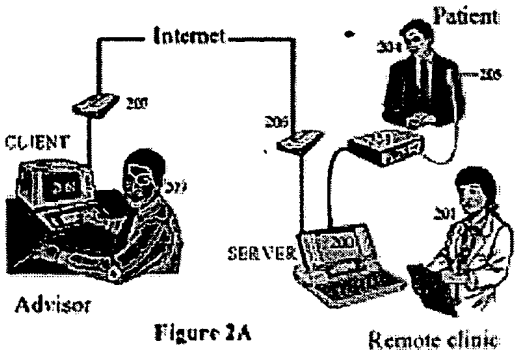


Figure 2A

FIG 2A

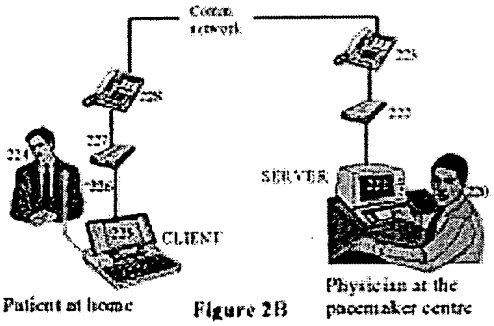


Figure 2B

FIG 2B

09/20/20 stamped

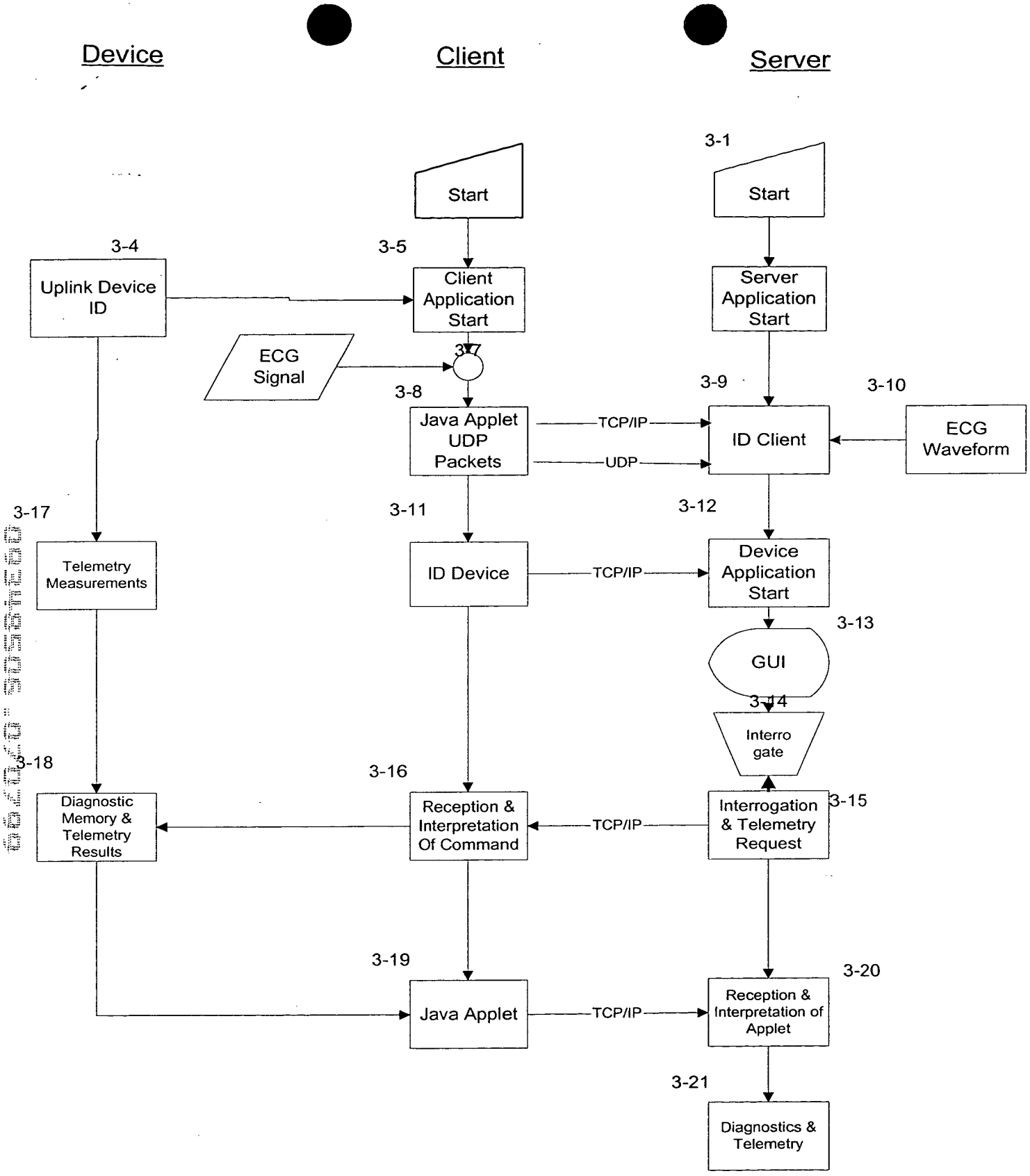

Device
Client
Server
3-1
Start
Start
3-4
3-5
Uplink Device ID
Client Application Start
Server Application Start
ECG Signal
3-7
3-8
3-9
3-10
Java Applet UDP Packets
TCP/IP
UDP
ID Client
ECG Waveform
3-17
3-11
3-12
Telemetry Measurements
ID Device
TCP/IP
Device Application Start
3-13
GUI
3-14
Interro gate
3-18
3-16
Diagnostic Memory & Telemetry Results
Reception & Interpretation Of Command
TCP/IP
Interrogation & Telemetry Request
3-15
3-19
3-20
Java Applet
TCP/IP
Reception & Interpretation of Applet
3-21
Diagnostics & Telemetry

FIG. 3A

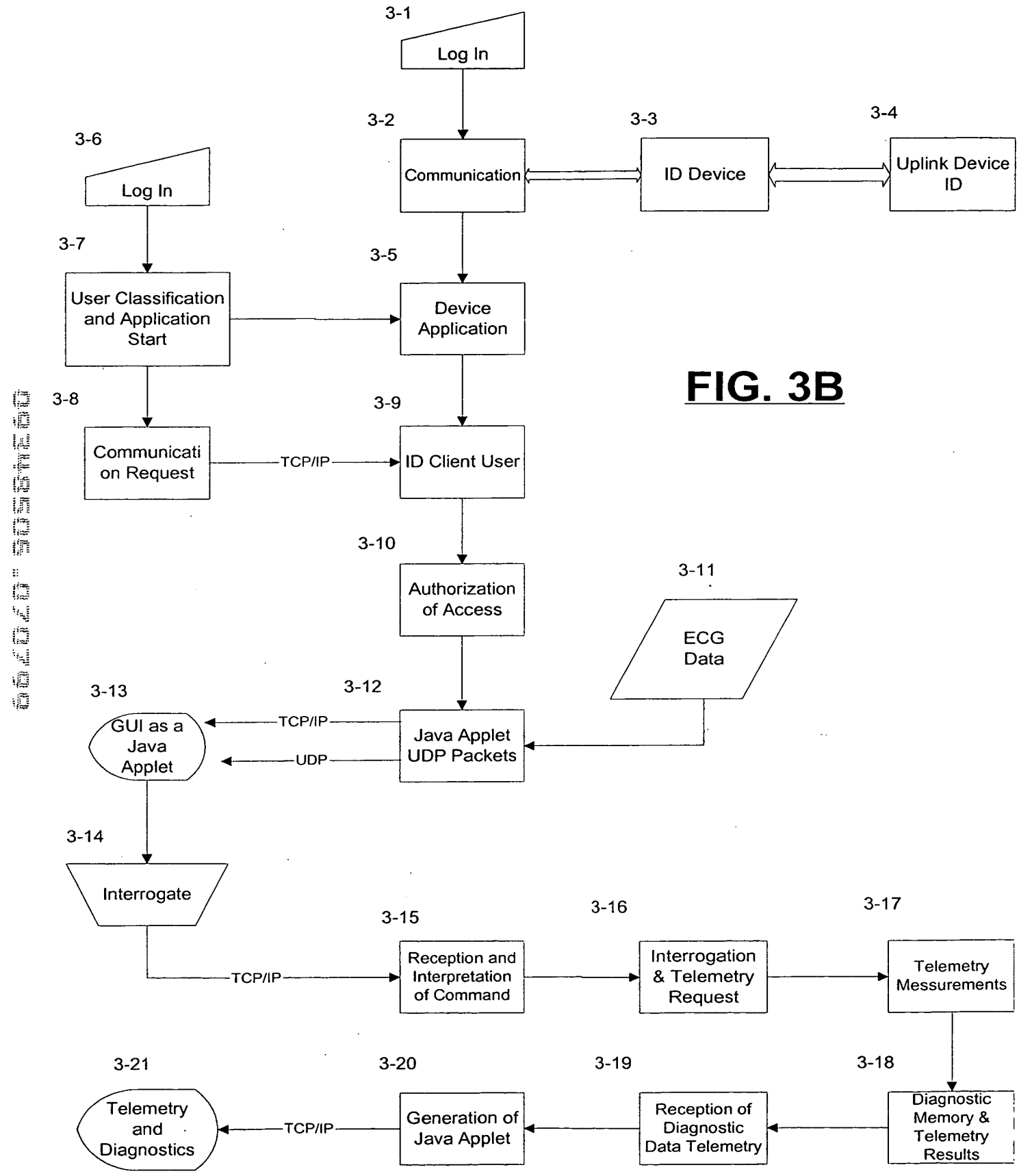
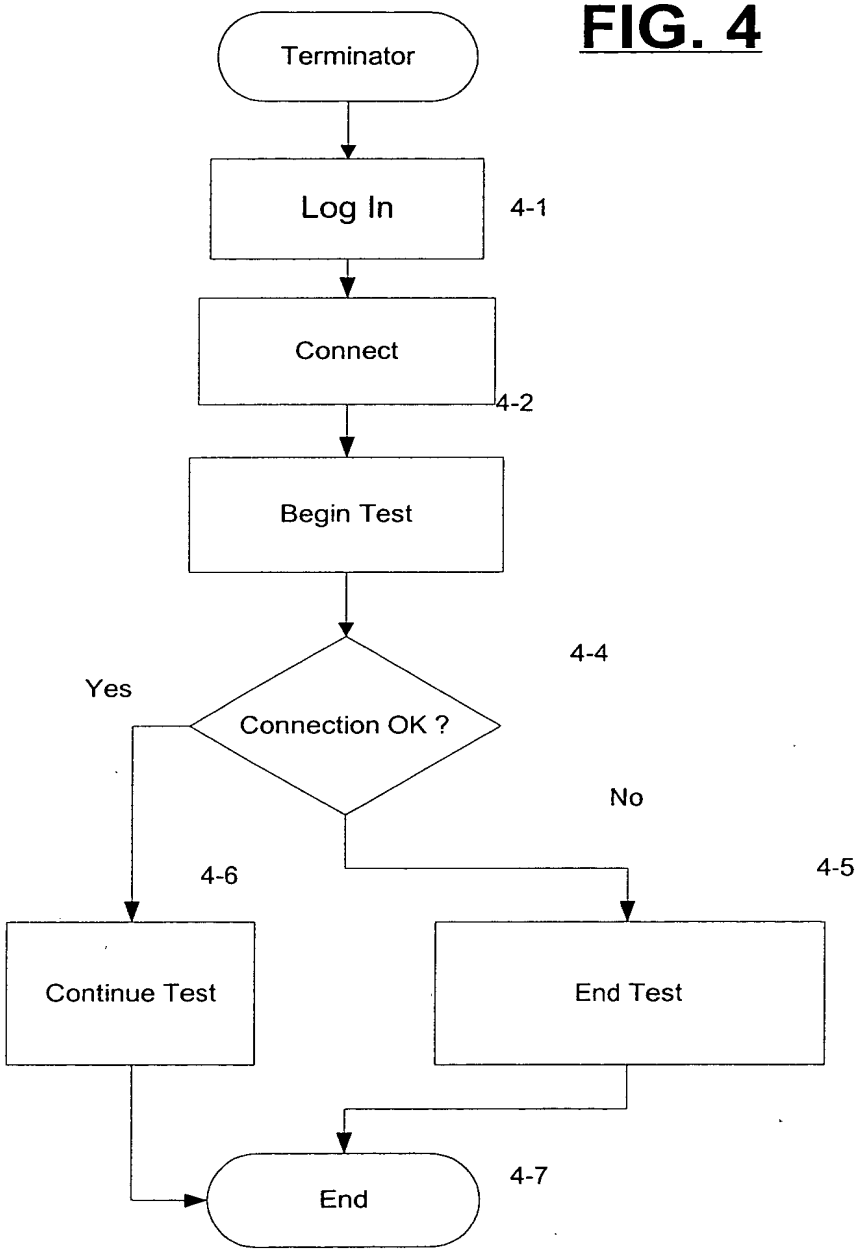

Client
Server
Programmer
Device
3-1
Log In
3-2
Communication
3-3
ID Device
3-4
Uplink Device ID
3-6
Log In
3-7
User Classification and Application Start
3-5
Device Application
3-8
Communicati on Request
TCP/IP
3-9
ID Client User
3-10
Authorization of Access
3-11
ECG Data
3-13
GUI as a Java Applet
3-12
Java Applet UDP Packets
TCP/IP
UDP
3-14
Interrogate
TCP/IP
3-15
Reception and Interpretation of Command
3-16
Interrogation & Telemetry Request
3-17
Telemetry Messurements
3-18
Diagnostic Memory & Telemetry Results
3-19
Reception of Diagnostic Data Telemetry
3-20
Generation of Java Applet
TCP/IP
3-21
Telemetry and Diagnostics

FIG. 3B

FIG. 4


Terminator
Log In
4-1
Connect
4-2
Begin Test
4-4
Connection OK ?
Yes
No
4-6
4-5
Continue Test
End Test
End
4-7

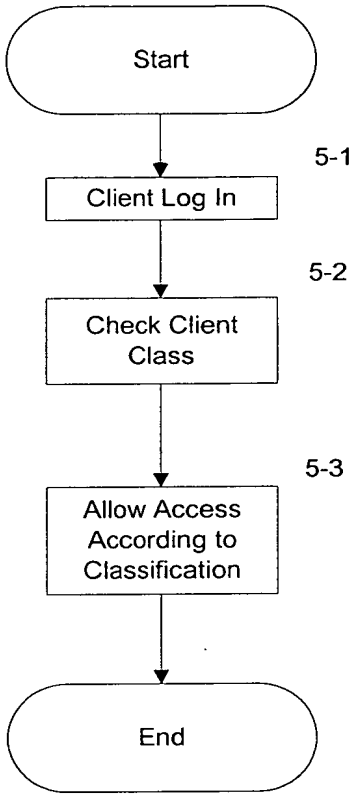

Start
5-1
Client Log In
5-2
Check Client Class
5-3
Allow Access According to Classification
End

FIG. 5

FIG. 6

Type of Information	Protocol For Transmission	
ECG Signal	UDP	Note - no receipt requested
Commands	TCP	Note - receipt requested
Marker Channel™	TCP	Note - receipt requested
Lead Parameters	TCP	Note - receipt requested
Battery Voltage	TCP	Note - receipt requested
Histogram	TCP	Note - receipt requested
	TCP	Note - receipt requested
	TCP	Note - receipt requested
	TCP	Note - receipt requested

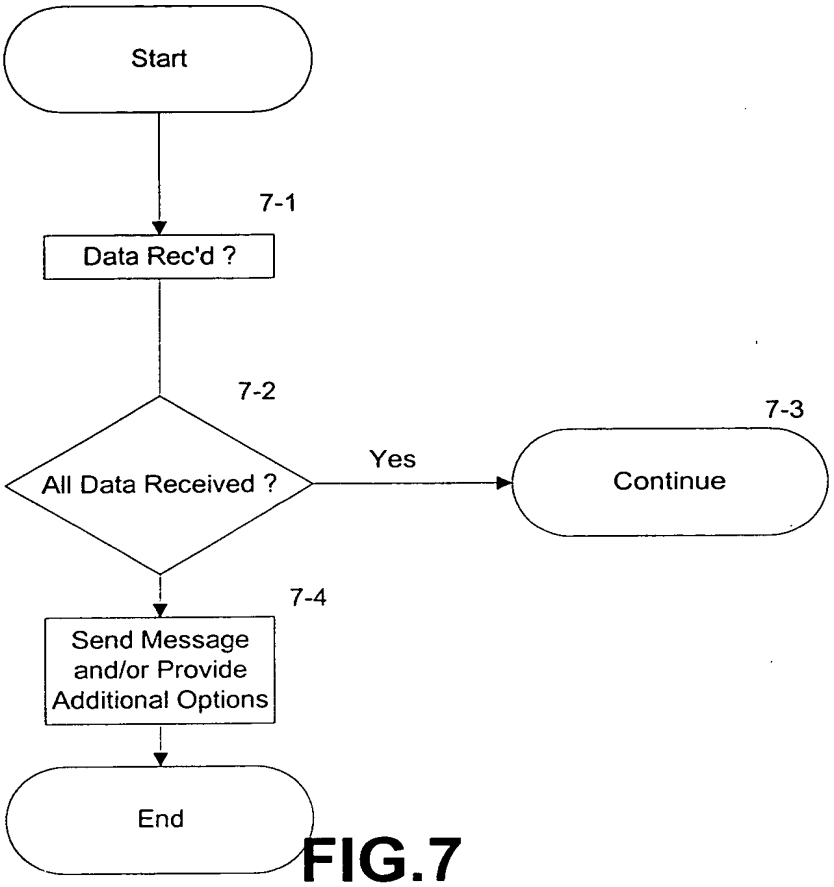

Start
7-1
Data Rec'd ?
7-2
All Data Received ?
Yes
7-3
Continue
7-4
Send Message and/or Provide Additional Options
End

FIG.7

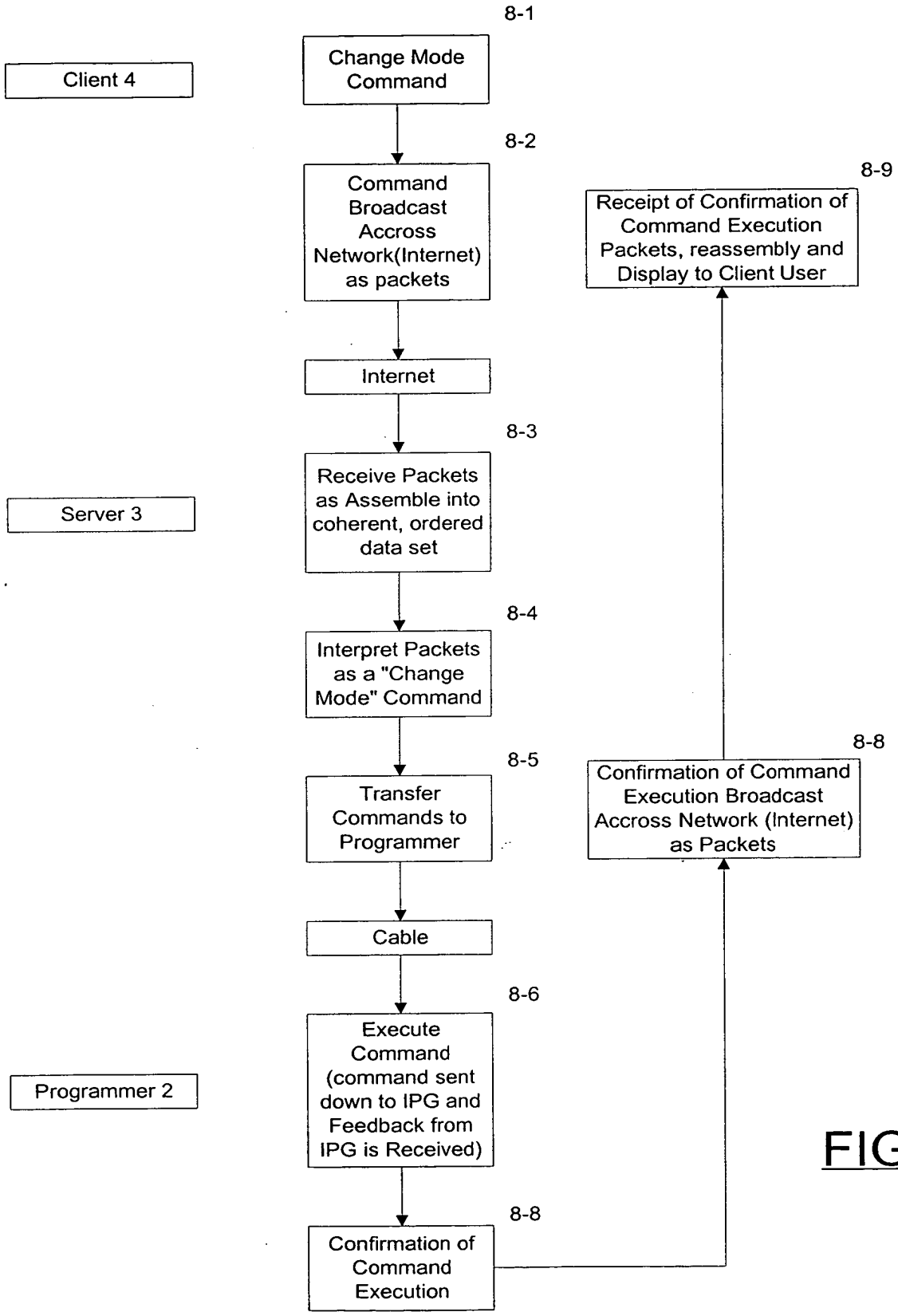

Client 4
Server 3
Programmer 2
8-1
Change Mode Command
8-2
Command Broadcast Accross Network(Internet) as packets
Internet
8-3
Receive Packets as Assemble into coherent, ordered data set
8-4
Interpret Packets as a "Change Mode" Command
8-5
Transfer Commands to Programmer
Cable
8-6
Execute Command (command sent down to IPG and Feedback from IPG is Received)
8-8
Confirmation of Command Execution
8-8
Confirmation of Command Execution Broadcast Accross Network (Internet) as Packets
8-9
Receipt of Confirmation of Command Execution Packets, reassembly and Display to Client User

FIG. 8

60202 9058260

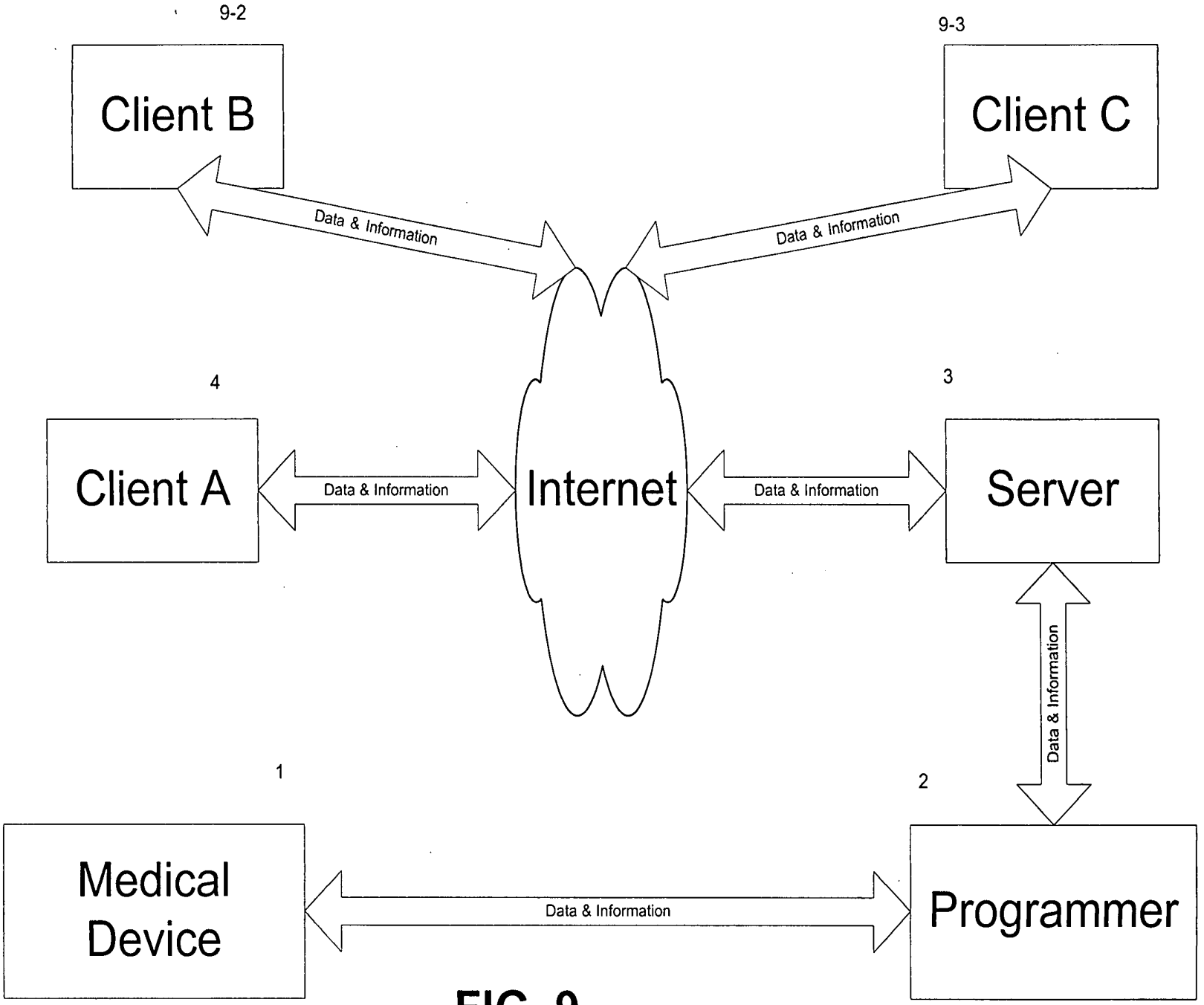


FIG. 9

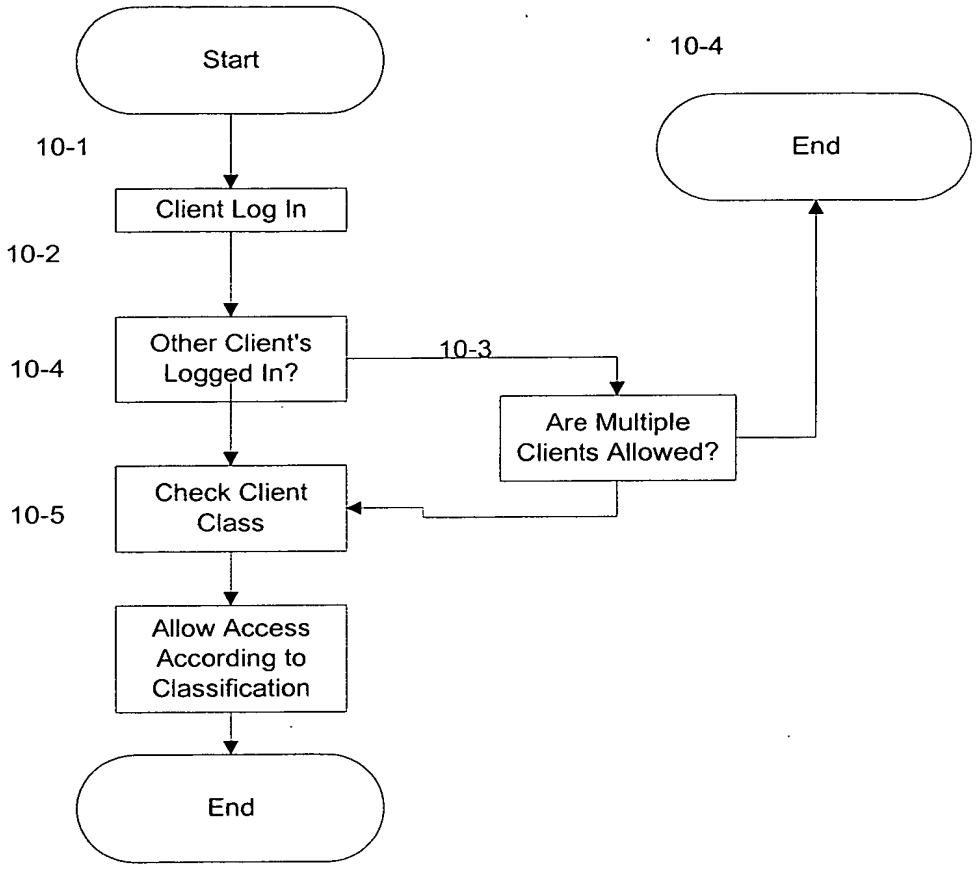

Start
10-1
Client Log In
10-2
Other Client's Logged In?
10-4
10-3
Are Multiple Clients Allowed?
10-4
End
Check Client Class
10-5
Allow Access According to Classification
End

FIG. 10

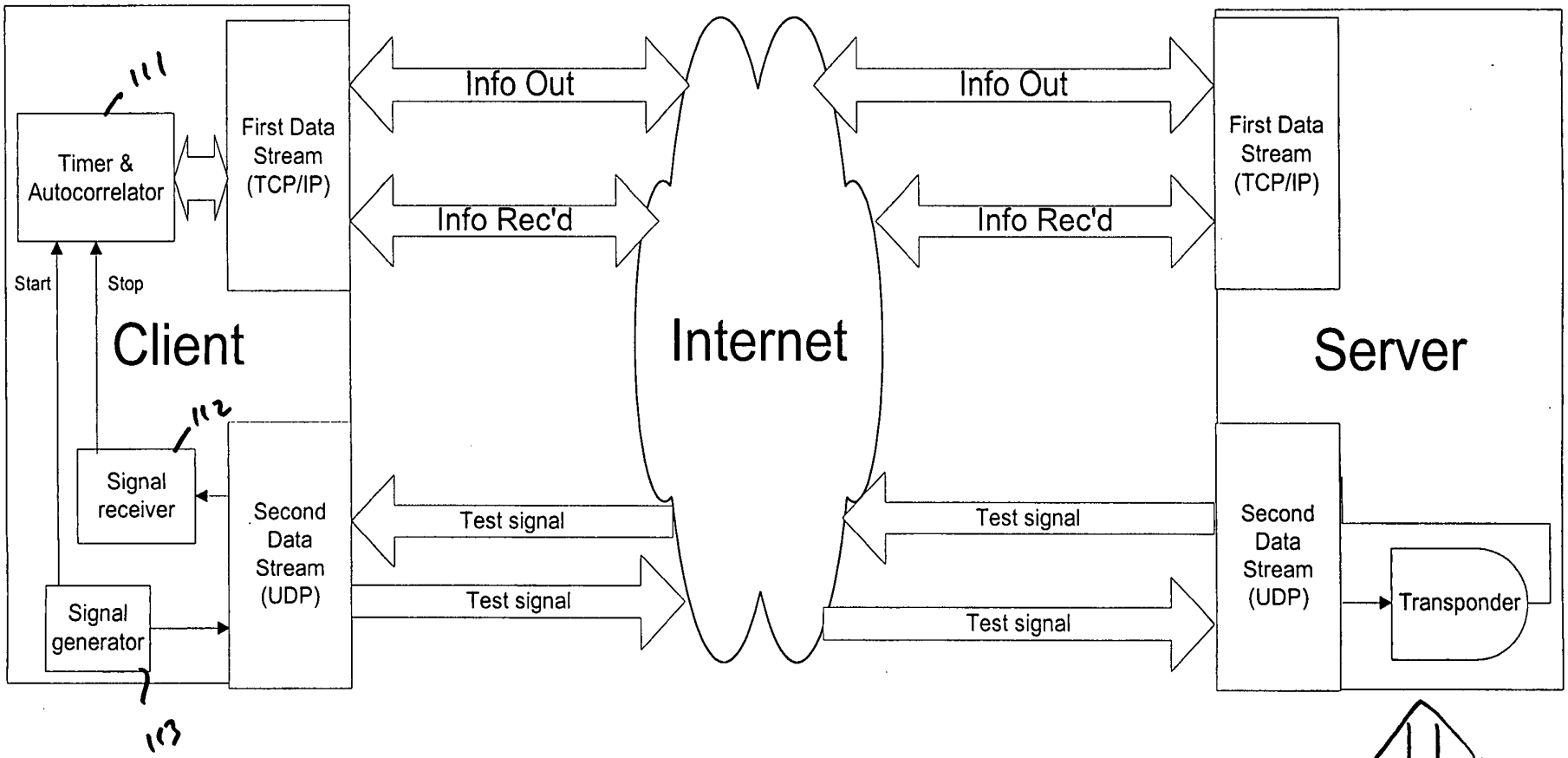
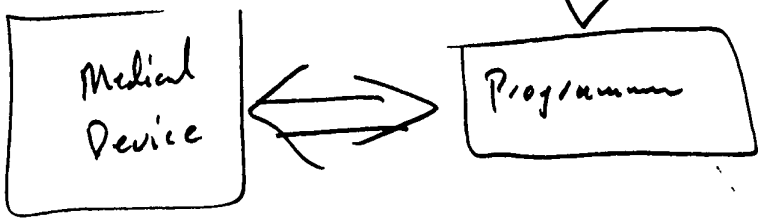

111
Timer & Autocorrelator
First Data Stream (TCP/IP)
Info Out
Info Rec'd
Info Out
Info Rec'd
First Data Stream (TCP/IP)
Start
Stop
Client
Internet
Server
112
Signal receiver
Second Data Stream (UDP)
Test signal
Test signal
Test signal
Test signal
Second Data Stream (UDP)
Transponder
Signal generator
113

Figure 11


Medical Device
Programmer

6620620 "9058n2a0

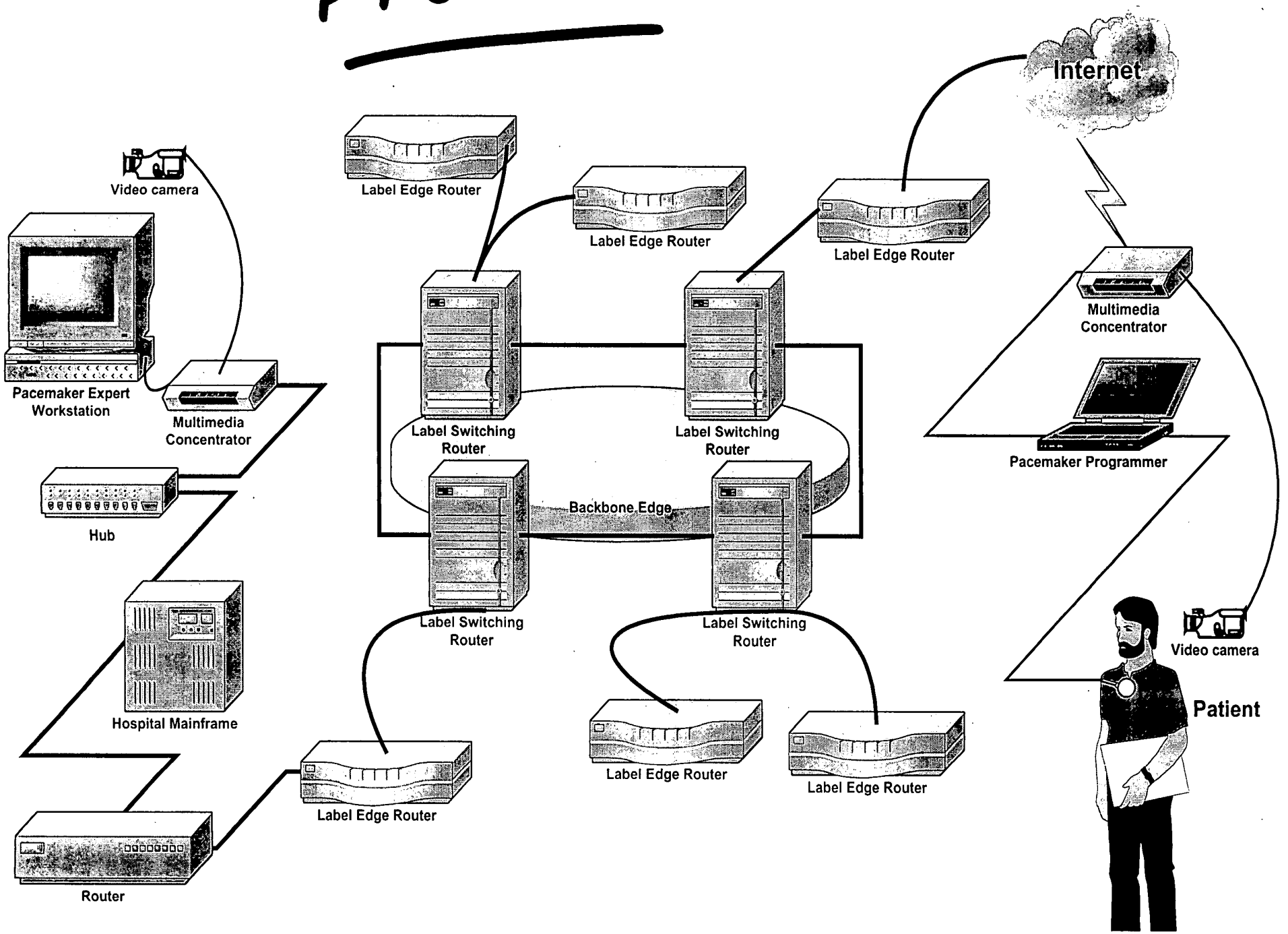



FIG 12